Proposed Amendments to the 2009 IRC and IPC

1. Proposed changes to the IRC:

P2608.5 Water supply systems.

Water service pipes, water distribution pipes and the necessary connecting pipes, fittings, control valves, faucets and all appurtenances used to dispense water intended for human ingestion shall be evaluated and listed as conforming to the requirements of NSF 61/NSF 372.

• P2722.1 General.

Fixture supply valves and faucets shall comply with ASME A112.18.1/CSA B125.1 as listed in Table P2701.1. Faucets and fixture fittings that supply drinking water for human ingestion shall conform to the requirements of NSF 61, Section 9. Flexible water connectors shall conform to the requirements of Section P2905.7.

P2903.9.4 Valve requirements

Valves shall be of an *approved* type and compatible with the type of piping material installed in the system. Ball valves, gate valves, globe valves and plug valves intended to supply drinking water anticipated for human consumption shall meet the requirements of NSF 61/NSF 372.

• P2905.2 Lead content.

Pipe and fittings used in the water-supply system shall have a maximum of 8-percent lead content. <0.25% lead in accordance with NSF 372.

P2905.4 Water service pipe.

Water service pipe shall conform to NSF 61/NSF 372 and shall conform to one of the standards listed in Table P2905.4. Water service pipe or tubing, installed underground and outside the structure, shall have a minimum working pressure rating of 160 pounds per square inch at 73°F (1103kPa at 23°C). Where the water pressure exceeds 160 pounds per square inch (1103kPa), piping material shall have a rated working pressure equal to or greater than the highest available pressure. Water service piping materials not-third party certified for water distribution shall terminate at or before the full open valve located at the entrance to the structure. Ductile iron water service pipe shall be cement mortar lined in accordance with AWWA C104.

P2905.5 Water-distribution pipe

Water-distribution pipe within *dwelling units* shall conform to NSF 61/NSF 372 and shall conform to one of the standards listed in Table P2905.5. All hot-water distribution pipe and tubing shall have a minimum pressure rating of 100 psi at 180°F (689 kPa at 82°C).

• P2905.6 Fittings.

Pipe fittings shall be *approved* for installation with the piping material installed and shall comply with the applicable standards listed in Table P2905.6. All pipe fittings used in water supply systems shall also comply with NSF 61/NSF 372.

• P2908.3 Connection tubing.

The tubing to and from drinking water treatment units shall be of a size and material recommended by the manufacturer. The tubing shall comply with NSF 14, NSF 42, NSF 44, NSF 53, NSF 58, or NSF 61/NSF 372.

2. Proposed changes to the IPC:

410.1 Approval. (Article I-13 of Amend Ord 12-024, 4/24/12)

Drinking fountains shall conform to ASME A112.19.1M, ASME A112.19.2M or ASME A112.19.9M and water coolers shall conform to ARI 1010. Drinking fountains and water coolers shall conform to NSF 61, Section 9/NSF 372. Where water is served in restaurants, drinking fountains shall not be required.

424.1 Approval.

Faucets and fixture fittings shall conform to ASME A112.18.1/CSA B125.1. Faucets and fixture fittings that supply water for human ingestion shall conform to the requirements of NSF 61, Section 9/NSF 372. Flexible water connectors exposed to continuous pressure shall conform to the requirements of Section 605.6.

605.2 Lead content of water supply pipe and fittings.

Pipe and fittings, including valves and faucets, utilized in the water supply system shall have a maximum of 8-percent lead content. <0.25% lead in accordance with NSF 372.

605.3 Water service pipe.

Water service pipe shall conform to NSF 61/NSF 372 and shall conform to one of the standards listed in Table 605.3. All water service pipe or tubing, installed underground and outside the structure, shall have a minimum working pressure rating of 160 psi (1100 kPa) at 73.4°F (23°C). Where the water pressure exceeds 160 psi (1100 kPa), piping materials shall have a minimum rated working pressure equal to the highest available pressure. Water service piping materials not third-party certified for water distribution shall terminate at or before the full open valve located at the entrance to the structure. All ductile iron service pipe shall be cement mortar lined in accordance with AWWA C104.

605.4 Water distribution pipe.

Water distribution pipe shall conform to NSF 61/NSF 372 and one of the standards listed in Table 605.4. All hot water distribution pipe and tubing shall have a minimum pressure rating of 100 psi (690 kPa) at 180°F (82° C).

Comment [SS1]: This will need to be changed in our current ordinance.

• 605.5 Fittings.

Pipe fittings shall be *approved* for installation with the piping material installed and shall comply with the applicable standards listed in Table 605.5. All pipe fittings utilized in water supply systems shall also comply with NSF 61/NSF 372. Ductile iron pipe shall be cement mortar lined in accordance with AWWA C104.

605.7 Valves.

All valves shall be of an *approved* type and compatible with the type of piping installed in the system. Ball valves, gate valves, globe valves and plug valves intended to supply water <u>for human ingestion</u> shall meet the requirements of NSF 61/NSF-372.

• 611.3 Connection tubing.

The tubing to and from drinking water treatment units shall be of a size and material as recommended by the manufacturer. The tubing shall comply with NSF 14, NSF 42, NSF 44, NSF 53, NSF 58, or NSF 61/NSF 372.

Affected Standards

2009 IBC Chapter 35, Referenced Standards

ASTM

• B 88-03-B 88-09 Specifications for Seamless Copper Water Tube... 909.13.1

2009 IRC Chapter 44, Referenced Standards

ASTM

- B 32-04-B 32-08 Specifications for Solder Metal... P3003.10.3, P3003.11.3
- <u>8 88 03 B 88 09 Specifications for Seamless Copper Water Tube... G2414.5.2, Table M2101.1, Table P2905.4, Table P2905.5, Table P3002.1(1), Table P3002.1(2), Table P3002.2</u>
- B 813-00e01_B 813-10 Specifications for Liquid and Paste Fluxes for Soldering of Copper and Copper Alloy Tube... M2101.1, P2904.14, P3003.3.4, P3003.10.3, P3003.11.3

NSF

- 61-2007a-61-2011-Drinking Water System Components-Health Effects... P2608.5, P2722.1, P2903.9.4, P2905.4, P2905.5, P2905.6, P2907.3-P2908.3
- <u>372-2011 Drinking Water System Components-Lead Content... P2608.5, P2722.1, P2903.9.4, P2905.4, P2905.5, P2905.6, P2908.</u>

2009 IPC Chapter 13, Referenced Standards

ASTM

- <u>B 32-04</u> <u>B32-08</u> Specifications for Solder Metal... 605.14.3, 605.15.4, 705.9.3, 705.10.3.
- <u>B 88-03 B 88-09</u> Specifications for Seamless Copper Water Tube...Table 605.3, Table 605.4, Table 702.1, Table 702.2, Table 702.3, Table 1102.4.
- B 813-00e01 B 813-10 Specifications for Liquid and Paste Fluxes for Soldering of Copper and Copper Alloy Tube... 605.14.3, 605.15.4, 705.9.3, 705.10.3.

NSF

- 61-2007a 61-2011 Drinking Water System Components-Health Effects... 410.1, 424.1, 605.3, 605.4, 605.5, 605.7, 611.3, 611.3
- 372-2011 Drinking Water System Components-Lead Content... P2608.5, P2722.1, P2903.9.4, P2905.4, P2905.5, P2905.6, P2908.

